

Application No.: 10/817484
Docket No.: AD6993USNA

Page 2

Amendments to Specification

Please amend the following paragraphs on pages 2-3 as follows:

Threat-resistant windows and glass structures are known and can be constructed utilizing conventional glazing methods. U.S. Patent No. 5,960,606 ('606) and U.S. Patent No. 4,799,3476 ('3476) each describes laminate windows that are made to withstand severe forces. In International Publication Number WO 98/28515 (IPN '515) a glass laminate is positioned in a rigid channel in which a resilient material adjacent to the glass permits flexing movement between the resilient material and the rigid channel. Other means of holding glazing panels exist such as adhesive tapes, gaskets, putty, and the like and can be used to secure panels to a frame. For example, WO 93/002269 describes the use of a stiffening member that is laminated to a polymeric interlayer around the periphery of a glass laminate to stiffen the interlayer, which can extend beyond the edge of the glass/interlayer laminate. In another embodiment, '269 describes the use of a rigid member, which is inserted into a channel below the surface of a monolithic transparency, and extending from the transparency.

Windows and glass structures capable of withstanding hurricane-force winds and high force impacts are not trouble-free, however. Conventional glazing methods can require that the glazing element have some extra space in the frame to facilitate insertion or removal of the glazing element. While the additional space facilitates installation, it allows the glazing element to move in a swinging, rocking, or rotational motion within the frame.

Application No.: 10/817484
Docket No.: AD6993USNA

Page 3

Further, it can move from side to side (that is, in the transverse direction) in the frame depending upon the magnitude and direction of the force applied against the glazing element. Under conditions of severe repetitive impact and/or either continuous or discontinuous pressure, a glass laminate can move within the frame or structural support in such a way that there can be sufficient stress built up to eventually fracture the window and allow the laminate to be pulled out of the frame. For example, when subjected to severe hurricane force winds the flexing movement in the windows of IPN '515, wherein glass flexes within a rigid channel, can gradually pull the laminate out of the channel resulting in loss of integrity of the structure. In '3746, the glass held against the frame can be broken and crushed, causing a loss of structural integrity in the window/frame structure. In WO '269, inserting a stiff foreign body into the interlayer as described therein can set up the structure for failure at the interface where the polymer contacts the foreign body when subjected to severe stresses.